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Some Records of Alaskan Acridoidea (Orthoptera)

By James A. G. Rehn, Curator of Insects, Academy of Natural Sciences of Philadelphia

In the Autumn of 1950 two small but interesting series of Alaskan grasshoppers were sent to me for identification and, in view of the scarcity of information relative to Orthoptera from that territory, the results of their examination are here presented. One series, sent to me by Dr. George H. Plumb, Assistant Entomologist of the Connecticut Agricultural Experiment Station, was secured by Dr. H. J. Lutz, of the Yale Forestry School; the other was largely secured and sent to me by Dr. Richard H. Washburn, Entomologist of the Alaska Agricultural Experiment Station of the University of Alaska at Palmer, Alaska. I have been privileged to retain the material secured by Dr. Lutz in the Academy series, as well as duplicate material from that sent by the Alaska Agricultural Experiment Station. One of the species here discussed was unreported previously from Alaska.

TETRIGIDAE

Tetrix granulata (Kirby)

Palmer; May 27 and June 18, 1950; (R. H. Washburn); 2 ♀; [Alaska Exper. Sta. and A.N.S.P.].

For the present at least, after the comparison of representative Old World series, I prefer to regard *granulata* of Kirby as distinct from the Palearctic *subulata,* under which the former was placed by Hebard.[1] I regard the case as less simple than

[1]Tech. Bull. 284, No. Dakota Agr. Coll., p. 27 (1936).

he stated, and believe that, until we have a better understanding of all the Palearctic forms related to *subulata,* it is most advisable to permit *granulata* to stand for the North American representative of the *subulata* species-group. The present material is fully in agreement with extensive representations from various parts of Canada, both east and west, and from the northern United States.

Hebard has reported this species from as far north as Dawson, Yukon, Canada,[2] and Fort Yukon, Alaska[3].

ACRIDIDAE

Acridinae

Neopodismopsis[4] **abdominalis** (Thomas)

Fairbanks; July 25, 1850; 1 ♀; [Alaska Exper. Sta.].

This is the first record of this species from Alaska. Fairbanks represents one of the two extreme northern points from which the species is now known. In 1930 Hebard[5] reported a single female of this species from Fort Rae, Great Slave Lake, Mackenzie, Canada, taken July 6, 1927, by R. H. Bedford, which is the other extreme point from which I have seen the species, which ranges southward in the Cordilleran region to New Mexico, and broadly eastward across Ontario. The most northern British Columbian specimen known to me is a female, in the Academy series, from Besa River, one mile south of Neve's Cabin, Upper Peace River District, taken August 4, 1922, at 4,000 feet elevation, by Miss Josephine deN. Henry.

Chorthippus longicornis (Latreille)

Circle; July 23, 1950; 1 ♂; [Alaska Exper. Sta.].

I also have before me, in the Academy series, an immature male taken at Fort Yukon, Alaska, June 1916, by J. A. Kusche.

[2] Proc. Acad. Nat. Sci. Phila., LXXX, p. 221 (1928).

[3] Proc. Acad. Nat. Sci. Phila., LXXVII, p. 46 (1925).

[4] I am using the name *Neopodismopsis* of Bey-Bienko in a generic sense only tentatively, as I think its proper status will be found to be that of a subgenus under *Chrysochraon.*

[5] Proc. Acad. Nat. Sci. Phila., LXXXII, p. 383 (1930).

Weber has reported this species from Fairbanks, Alaska,[6] but the two localities here given are slightly more northern.

Cyrtacanthacridinae

Melanoplus mexicanus (Saussure)

Fairbanks; July 25, 1950; 4 ♂, 5 ♀; [Alaska Exper. Sta. and A.N.S.P.].

Circle; July 23, 1950; 1 ♂, 1 ♀; [Alaska Exper. Sta.].

Big Delta; July 18, 1950; (R. H. Washburn); 2 ♂, 7 ♀, 1 juv.; [Alaska Exper. Sta. and A.N.S.P.].

Buffalo Center, Big Delta; August 4, 1950; (H. J. Lutz); 7 ♂, 3 ♀; [A.N.S.P.].

Bodenburg Butte; July 17, 1950; (H. J. Lutz); 3 ♂, 6 ♀, 8 juvs.; [A.N.S.P.].

Palmer; September 2–15, 1950; (R. H. Washburn); 1 ♂, 5 ♀, 1 juv. (Sept. 2); [Alaska Exper. Sta. and A.N.S.P.].

Near junction of Moose Pass-Hope Highway and Moose Pass-Kenai Highway (lat. 60° 32′ N., 149° 32′ W.), elev. 1,800 feet; August 26, 1950; (H. J. Lutz); 1 ♂, 5 ♀, 1 juv.; [A.N.S.P.].

I am referring these specimens to *mexicanus* without further specification, as that species appears to break up into a number of regional subspecies, aside from its gregarious migratory (*spretus*) phase. The exact determination of these subsidiary entities, for some of which names are already available, and the critical mapping of their respective distributional areas are matters for future study. Scudder's *Melanoplus alaskanus* has been regarded as an extreme condition of *M. bruneri,* but that is incorrect, and the name probably applies to a northwestern subspecies of *mexicanus.*[7] It is probable that previous Alaskan reports of *bruneri* really refer to the present species, the two frequently being confused.

Notes with the Bodenburg Butte series state the species was

[6] Entom. News, LX, p. 121 (1949).

[7] Hebard (Proc. Acad. Nat. Sci. Phila., LXXX, pp. 281–282 (1928)) has given a concise and fully warranted discussion of the situation relative to the use of the name *alaskanus.*

there "abundant in sage brush and grass," while those from Buffalo Center are noted as having been "abundant on grass flats."

All of the adults here listed have reddish, pinkish or pinkish-buff caudal tibiae, except the single male from near the junction of the two highways, which has them in part muddy glaucous. Occasionally some have the tibiae reddish or pinkish only distad and infuscate proximad.

The adult material here listed can be grouped in two series on the basis of alar length; in one the alar organs, when in respose, exceed the apices of the caudal femora by a distance equal to, or nearly equal to, the length of the pronotum, while in the other these organs either do not exceed the femoral apices or at most by a very slight distance. All Big Delta and Buffalo Center individuals have the more ample flight organs, but several have them slightly shorter than the others from those localities. The Fairbanks series has three males long-winged, and one definitely in the shorter category, while of the five females but one is definitely in the long-winged grouping. All the other specimens here recorded have the alar organs of the shorter (or more normal) type, although the Palmer series has them rather longer than those from Circle, Bodenburg Butte or from the junction of the highways. It is possible these longer winged individuals indicate areal population pressure producing a *spretus* phase.[8]

The male individuals in the present series show a fair degree of variation in their external genitalia, but not more than is to expected from any representation of this species from equally diverse habitats. The male subgenital plate varies somewhat in its length, but it is never of the relatively distinctive *bruneri* type, and the apex is always markedly notched.

The material from Circle and Fairbanks is from near the northern limit of the distribution of this widely-ranging species. However, there are in the Academy series a single adult male,

[8] The comments of the late J. R. Parker relative to the direct effect of food on wing length in this species, written nearly twenty-five years ago, are well worth reading in retrospect. They were quoted by Hebard in 1928 (Proc. Acad. Nat. Sci. Phila., LXXX, pp. 283–284).

three adult females and nine immature individuals taken at Fort Yukon, Alaska (at lat. 66° 32′ N.), June 1916, by J. A. Kusche, which is, as far as known, the most extreme northern point for *M. mexicanus*.

Melanoplus fasciatus (F. Walker)

Fairbanks; July 25, 1950; 1 ♀; [Alaska Exper. Sta.].
Big Delta; July 18, 1950; 1 ♂; [Alaska Exper. Sta.].

I have also seen a female of this species taken at Rampart House, Yukon, Canada, August 25–29, 1912, by J. M. Jessup, in the Academy series, and a pair, in the same collection, from Cameron Bay, Great Bear Lake, Mackenzie, Canada, taken August 12, 1937, by T. N. Freeman, which probably represent the most northern known records for the species. Hebard had already reported it from Lake Sarah, Great Slave Lake, Mackenzie, Canada.[9]

A New Subgenus of Ambrysus from South America (Hemiptera: Naucoridae)

By Ira La Rivers, University of Nevada, Reno

PICROPS subgenus novum

The salient features of subgeneric importance separating *Picrops* from the subgenus *Ambrysus* can be summarized in the couplet—

Metatibia ventrally with more than 3 distal, transverse rows of spines, the terminal row longest, each row decreasing in length proximally; male possessing a short, lateral process on the sixth tergite ..... *Picrops*
Metatibia ventrally with 3 or less such rows; male lacking a short, lateral process on the sixth tergite ..... *Ambrysus*

At present, *Picrops* is known only from the single species, described below.

[9] Proc. Acad. Nat. Sci. Phila., LXXXII, p. 396 (1930).